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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,128	09/13/2000	Gerard Lang	05725.0632	7777

7590

01/02/2003

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1300 I Street NW  
Washington, DC 20005

EXAMINER

ELHILO, EISA B

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 01/02/2003

18

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/600,128

Applicant(s)

LANG ET AL.

Examiner

Eisa B Elhilo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 32-36 and 38-69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-36, 38-41, 43, 44, 49, 50 and 56-69 is/are rejected.
- 7) ☒ Claim(s) 42, 45-48 and 51-55 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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Claims 32-36 and 38-69 are pending in this application.

### **DETAILED ACTION**

#### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 32-36, 38-41, 43-44, 49-50 and 56-69 rejected under 35 U.S.C. 103(a) as being unpatentable over Aaslyng et al. (WO 97/19998) in view of de la Mettrie et al. (US 5,989,295).

Aaslyng (WO' 998) teaches a hair dyeing composition comprising oxidation bases of heterocyclic bases such as 2,6-diaminopyridine (see page 6, lines 35), laccase enzyme derived from plant, animal, fungal, bacteria origin as claimed in claims 32-36 (see page 5 line 20). The fungal origin enzyme includes *Aspergillus* species as claimed in claim 38, (see page 5, line 20-24), 0.1% of benzenic oxidation bases such as p-phenylenediamine as claimed in claims 56-58 (see page 9, line 34), benzenic couplers such as m-phenylenediamine (see page 10, line 8). The composition has a pH in the range of 6.0 to 8.0, which is within the claimed range (see page 6, line 12). Aaslyng also teaches a method for dyeing hair comprising applying to the hair a dyeing composition as described above for a period which similar to the claimed method (see page 21, claim 10).

The reference fails to teach a dyeing composition comprising heterocyclic couplers as claimed. Also, the reference does not teach the amount of the laccase enzyme as claimed in claim 39. Further, the reference does not teach specific heterocyclic oxidation bases of pyrimidine

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derivatives as claimed in claims 40-41. Furthermore the reference does not teach direct dyes as claimed in claim 58.

However, the reference teaches heterocyclic oxidation bases such as 2,6-diaminopyridine (see page 6, line 35).

De la Mettrie (US' 295) in analogous art of hair dyeing compositions teaches a composition comprising heterocyclic couplers such as 1-H-3-methylpyrazol-5-one and 1-phenyl-3-methylpyrazol-5-one compounds and benzenic couplers such as 1,3-diaminobenzene and 2-methyl-5-aminophenol (see col. 8, lines 1-24), heterocyclic oxidation bases such as 2,4,5,6-tetraaminopyrimidine (see col. 7, lines 51-52), sesamol (see col. 8, line 6), 3,4-diaminopyrazole (see col. 7, line 60) and direct dyes (see col. 8, line 36). Further de la Mettrie teaches a multi-compartment kit similar to those claimed (see col. 3, lines 27-45).

Therefore, in view of teaching of the secondary reference one having ordinary skill in the art at the time the invention was made would be motivated to modify the primary reference by incorporating the heterocyclic couplers as taught by De la Mittre to make such a dyeing composition. Such modification would be obvious because de la Mittre clearly teaches the equivalence of heterocyclic couplers and benzenic couplers, which are both, used conventionally in oxidation dye compositions (see col. 8, lines 1-24). Also, it would have been obvious to modify the primary reference by incorporating the oxidation base of 2,4,5,6-tetraaminopyrimidine and 3,4-diaminopyrazole as taught by De la Mittre to make such a dyeing composition because the primary reference suggest the use of heterocyclic oxidation bases in the dyeing composition and the secondary reference teaches hair dyeing composition comprising heterocyclic oxidation thus, a person of ordinary skill in the art would expect such a composition

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to have similar properties to those claimed, absent unexpected results. Further, with respect to claim 40, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the amount of the enzyme in the dyeing composition because the reference teaches the method of determination of the enzyme activity which further depends on the amount of the enzyme used in the composition (see page 10, last paragraph, and page 11, lines 1-2) and, thus, a person of ordinary skill in the art would be able to optimize the amount of the enzyme in the dyeing composition in order to get excellent results.

***Allowable Subject Matter***

2. Claims 42, 45-48 and 51-55 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record does not teach or disclose hair dyeing composition comprising heterocyclic oxidation bases of pyrazolpyrimidine and heterocyclic couplers such as bezimidazole, bezomorpholine, pyrazoloazole, pyrroloazole, imidazoloazole and pyrazolopyrimidine derivatives as claimed.

***Response to Applicant's Arguments***

3. Applicant's arguments filed 10/10/2002 have been fully considered but they are rendered moots in view of new ground of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B Elhilo whose telephone number is (703) 305-0217. The examiner can normally be reached on M - F (7:30-5:00) with alternate Friday off.

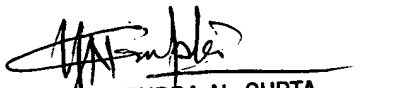
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Elhilo

December 28, 2002



YOGENDRA N. GUPTA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700